



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 16-009
Date Opened: 07/06/2016
Investigator: Robert Young
Approver: Stephen Ridella
Subject: Sudden brake failure - Motorcycle
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Harley-Davidson Motor Company
Products: 2008-11 Harley Davidson Motorcycles with ABS
Population: 430,000
Problem Description: The ABS module corrodes and fails as a result of the brake fluid absorbing moisture from the surrounding environment. Sudden brake failure may occur w/o warning.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	43	TBD	43
Crashes/Fires:	3	TBD	3
Injury Incidents:	2	TBD	2
Number of Injuries:	2	TBD	2
Fatality Incidents:	0	TBD	0
Number of Fatalities:	0	TBD	TBD

ACTION / SUMMARY INFORMATION

Action: Open a Preliminary Evaluation (PE)

Summary:

Riders report sudden brake system failure occurring without warning. Minimal to no deflection is noted when applying either the front brake hand lever or rear brake foot pedal with no discernible braking effect. Commonly, only one braking channel (front or rear) is reportedly affected although one report alleging simultaneous loss of both (resulting in a low speed crash into a garage door) has been received. Harley Davidson has a two year brake fluid replacement interval which owners are either unaware of or ignore. The "old" fluid, which is hygroscopic, becomes contaminated by moisture and allegedly corrodes the ABS actuator valves. The valves then fail to cycle and the affected brake calipers are no longer actuated when riders apply the brake(s). While it may be true that the complainants failed to adhere to Harley Davidson's 2 year brake fluid service interval requirement, the consequent sudden and complete loss of brake(s), without warning, is a concern.

Referenced VOQs: 10870040,10865577,10865252,10863506,10862470,10862218,10861455,
10861158,10855689,10855402,10854599,10854485,10853107,10850506,
10837699,10837548,10837007,10836858,10825939,10821535,10818724,
10810477,10809429,10808898,10808063,10806328,10787797,10779228,
10721585,10703439,10701606,10694431,10660452,10593383,10584542,
10578439,10566734,10564630,10551177,10551156,10503346,10461323,
10460899